

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,257	01/09/2001		David Vardi	P/1318-117	6554
2352	7590	. 09/23/2004	•	EXAM	INER
00		ER GERB & S	WEST, JEFFREY R		
	1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			ART UNIT	PAPER NUMBER
	,		2857		

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summany	09/757,257	VARDI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Jeffrey R. West	2857				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be to within the statutory minimum of thirty (30) days and will expire SIX (6) MONTHS from cause the application to become ABANDON	imely filed  ays will be considered timely.  m the mailing date of this communication.  IED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 17 M	arch 2004.					
	and the contract of the contra					
,						
Disposition of Claims						
4) ☐ Claim(s) 1-25 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-25 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on 27 January 2003 is/are:  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	a)⊠ accepted or b)⊡ objected and accepted or b) objected drawing(s) be held in abeyance. So ion is required if the drawing(s) is constant.	ee 37 CFR 1.85(a). Objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summa Paper No(s)/Mail 5) Notice of Informal 6) Other:					

Art Unit: 2857

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 3-8, 11, 13, 15, 16-22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,590,056 to Barritz in view of U.S. Patent No. 5,671,412 to Christiano and further in view of Wong, "Oracle's new pricing targets Net users".

Barritz discloses a method, apparatus, and corresponding system for monitoring, tracking, and controlling the use of software products over time by implementing a surveying program, a monitoring program, a reporting program, and a knowledge base (column 4, lines 35-43) wherein the monitoring program and software product under analysis are executed concurrently but as separate software programs (column 7, lines 9-12) and the knowledge base, supplemented by user inputted information (column 11, lines 16-25) and containing information on the software module records, product records, and vendor records (column 5, lines 35-65), is stored in a separate physical storage device than the other information logs (column 6, lines 5-9).

Art Unit: 2857

Barritz further discloses that the monitoring program repetitively/continuously (column 9, lines 13-15 and column 10, lines 55-56) extracts information about the software usage based on user supplied specifications such as types of modules, locations of modules, or specific products, events, or periods of time (column 10, lines 45-49) and once the monitoring program has run for a sufficient period of time, the information is stored and processed in the information storage log according to user-requests or specified formats (column 10, lines 7-27), with associated time stamping (column 10, lines 28-33), for the end result of generating a plurality of usage reports (column 8, lines 43-63). Barritz discloses that the reporting program sorts, correlates, consolidates, summarizes, formats, and outputs reports (column 8, lines 36-42) as well as performs any necessary filtering (column 8, line 64 to column 9, line 11). Barritz then discloses that the output reports, indicating results of substantially all of the software produce on the computer (column 8, lines 49-58), may be displayed to the user by the surveying program itself, or sent to another computing program for further manipulation and display (column 9, lines 34-47).

As noted above, Barritz teaches several methods and criteria for obtaining data relating to software usage as well as storing vendor based information in a knowledge base, however, Barritz does not include using the same methods and criteria to dynamically obtain computer capacity data for normalizing the corresponding software usage data.

Christiano teaches a software license management system for managing the usage of software products (column 1, lines 5-7) by determining the execution of the

software (column 6, lines 43-52) and a providing a metering function that determines the amount of time, and the number of times, that the user activates the software to insure compliance with license agreements (column 7, lines 20-30). Christiano also teaches determining the vendor and version information about the component using the software, when requesting usage of the software (column 9, lines 9-20), and, during software usage, providing the stored vendor information to determine the amount of usage remaining on the license based on an obtained environmental resource capacity index number, that is developed through use of a license manager server (column 4, lines 39-44) and based on a particular computer system's processor (column 16, lines 56-65). Christiano then teaches using the environmental resource capacity number to combine the corresponding usage information with the capacity data to form raw, normalized software data to account for difference in the hardware speed (column 16, line 52 to column 17, line 15), such as the speed of the processor (column 4, lines 9-11), or other time-variant capacity data (i.e. disk drive space or memory space) (column 17, lines 6-9).

It would have been obvious to one having ordinary skill in the art to modify the invention of Barritz to include obtaining computer capacity data for normalizing the corresponding software usage data, as taught by Christiano, because, as suggested by Christiano, the combination would have fairly adjusted the software usage data to account for actual usage differences caused by platform specifications (column 2, lines 58-65).

Furthermore, although the invention of Barritz and Christiano doesn't specifically disclose restating the results of the software usage data based on the variations over time of the computer capacity data, since Barritz discloses the second software including a reporting program that sorts, correlates, consolidates, summarizes, formats, and outputs usage reports (column 8, lines 36-42) and the invention of Christiano teaches combining usage information with the capacity data to form raw, normalized software data to account for difference in the hardware speed (column 16, line 52 to column 17, line 15), it would have been obvious to one having ordinary skill in the art to feedback the combined data into the reporting program of the second software to form a new report (i.e. restate) in order to insure accurate, updated, results in the corrected usage report.

Page 5

As noted above, the invention of Barritz and Christiano teaches many of the features of the claimed invention, and while the combination teaches determining a capacity index of the computer based on parameters such as processor speed, disk drive space, or memory space, the combination does not specifically indicate determining the computer capacity dynamically over time.

Wong teaches software for implementing a new pricing model based upon processor power, or MIPS, (page 1, paragraph 5) wherein the software determines when the computer capacity changes (i.e. dynamic computer capacity) and adjusts a corresponding usage profile accordingly (page 1, paragraphs 5-6).

It would have been obvious to one having ordinary skill in the art to modify the invention of Barritz and Christiano to include specifying the determination of the

computer capacity dynamically over time, as taught by Wong, because, as suggested by Wong, the combination would have provided a more accurate way to gauge usage while continuously monitoring changes in computer capacity to fairly represent the usage over time (page 1, paragraphs 5, 6, and 8 and page 2, paragraph 1).

With respect to claims 11 and 17 invention of Barritz, Christiano, Wong, teaches determining computer capacity index (Christiano, column 17, lines 9-12) based upon system processing power and MIPS (Wong, page 1, paragraphs 5, 6, and 8) and the Examiner takes Official Notice that a system's total processing capability (i.e. processing power) is based upon the number of processors (see for example, U.S. Patent No. 6,496,823 to Blank et al., column 6, lines 51-55).

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barritz in view of Christiano and Wong, and further in view of U.S. Patent Application Publication No. 2002/0023260 to Isman.

As noted above Barritz in combination with Christiano and Wong teaches all of the features of the claimed invention except for basing the correlation between capacity data and software usage on statistical analysis.

Isman teaches a method for analyzing the capacity of parallel processing systems by evaluating the performance of an application executing on a parallel processing system based on assumed data set sizes and variations of the architecture of the system (0011). Isman teaches implementing this method by

creating a graph and a corresponding file that describes the application on the parallel processing system and using, in conjunction with the processing speeds of the system components, the flow of data, and the size and counts of data records throughout the system, determine equations for the amount of time required for each component (0012). Isman also teaches representing the execution of a particular application with the graph (0028), and details about the parallel processing system such as processing rate in MB/sec (0032), obtained through monitoring of the software (0029), that are created in the table file to calculate the processing and execution times (0034), time based capacity data (0060), and statistical data over time (0063 and 0064) that can be used to monitor the execution of the application on the system and providing this information to a user (0054 and Figure 5).

It would have been obvious to one having ordinary skill in the art to modify the invention of Barritz, Christiano, and Wong to include basing the correlation between capacity data and software usage on statistical analysis, as taught by Isman, because, as suggested by Isman, the combination would have provided a method for analyzing the performance of an application executing on a system by taking into account all the factors that effect the execution of the application over time using statistical trends in order to obtain accurate results (0009).

4. Claims 9, 10, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barritz in view of Christiano and Wong, and further in view of U.S. Patent No. 4,937,863 to Robert et al.

As noted above, Barritz in combination with Christiano and Wong teaches many of the features of the claimed including determining capacity data based on CPU speed, but do not teach accessing a knowledge base and deriving from it information to compute the computer capacity data.

Robert teaches a software licensing management system that determines if the usage of the licensed program is permitted under usage limitations stored in a table format (column 4, lines 11-19) as well as allowing the digital data processing system to control use of a licensed program based on criteria stored in a license data base (i.e. knowledge base) for providing pricing based on a per processor method rather than all of the processors (column 5, line 63 to column 6, line 8). Robert also teaches that the data base comprises a number of fields including producer name, vendor name, and processor power (column 6, lines 15-21 and 41-47) and uses this processor power data, with or without data that relates to the number of users, to adjust the usage data of the program (column 6, lines 47-60).

It would have been obvious to one having ordinary skill in the art to modify the invention of Barritz, Christiano, and Wong to include accessing a knowledge base and deriving from it information to compute the computer capacity data, as taught by Robert, because Barritz in combination with Christiano and Wong does teach determining capacity data based upon parameters specific to a particular system and, as suggested by Robert, the combination would have provided a method for storing such parameters/data that is used to determine the usage data of the license

Art Unit: 2857

in a form that allows easy access by the means for determining the capacity data (column 1, lines 58-63 and column 2, lines 11-20).

Also, since the invention of Barritz, Christiano, and Wong does disclose supplementing the knowledge base with user supplied information (Barritz, column 11, lines 16-25) it would have been obvious to one having ordinary skill in the art to do so by accessing the knowledge base via an application program interface because it would have provided a user-friendly method of providing the necessary information without requiring programming changes, as is well-known in the art (see for example U.S. Patent No. 6,477,520 to Malaviya et al., column 6, lines 1-3 and U.S. Patent Application Publication No. 2001/0025304 to Keith, Jr., 0104).

5. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barritz in view of Christiano and Wong and further in view of U.S. Patent No. 5,864,620 to Pettitt.

As noted above, Barritz in combination with Christiano and Wong teaches all the features of the claimed invention including distributing software to users based on license information (Christiano, column 3, lines 47-54) but do not teach specifying that the output information be sent to a computing facility that comprises a central clearing house.

Pettitt teaches a method and system for controlling distribution of software in a multi-tiered distribution chain comprising a software author, one or more distributors, one or more optional resellers, an end user, and a license clearing house (column 3,

lines 27-36) that performs a validation step to produce a code that indicates whether or not a valid software distribution transaction is authorized (column 4, lines 52-62).

It would have been obvious to one having ordinary skill in the art to modify the invention of Barritz, Christiano, and Wong to include specifying that the output information be sent to a computing facility that comprises a central clearing house, as taught by Pettitt, because, as suggested by Pettitt, the combination of Barritz, Christiano, and Wong does teach sending output reports to various locations for further analysis (Barritz, column 9, lines 34-47) and the combination would have provided a method for allowing the distributor of the software to distinguish authorized users from unauthorized users in order to determine proper payment schedules (column 3, lines 13-26).

## Response to Arguments

6. Applicant's arguments filed 17 March 2004 have been fully considered but they are not persuasive.

First, the Examiner asserts that it is accepted and admitted that it is well known in the art that a system's total processing capability (i.e. processing power) is based upon the number of processors (See, MPEP 2144.03; "If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art

Art Unit: 2857

because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate.")

Applicant also argues that "[r]elative to the claimed 'first software', the Examiner has relied on the secondary reference, Christiano '412. Respectfully, the applicant's examination of the '412 patent does not disclose <u>any software program</u> that is proactively executed and run to determine the capacity of the computer. Certainly, there is no program disclosed to do so 'dynamically over time'."

The Examiner asserts that the invention of Christiano is not included to teach determining the capacity "dynamically over time" since the invention of Wong is further included to teach this feature.

With respect to the use of a first software to determine the capacity of the computer, Christiano specifically states "When a client checks out a capacity license, the license server receives an 'environmental resource capacity' of the client" (column 16, lines 65-67), "Typically, the resource capacity can be determined on the client computer system end and sent in the request to the license server" (column 17, lines 12-15), and "The resource capacity can be provided by the client computer system or program and is calculated based on predetermined criteria, as described with reference to FIGS. 7 and 10. Alternatively, the resource capacity can be calculated by the license server based on information provided by the client such as type of hardware platform, identify user, etc." (column 19, lines 30-36). These sections indicate that some type of software program determines the capacity of the computer.

Art Unit: 2857

Further, it is noted that independent claims 1 and 25 specifically state, "running a first software and determining the capacity of the computer dynamically over time and obtaining computer capacity data". These limitations only require running a first software and determining/obtaining the capacity data and does not specify that the first software itself determines/obtains the capacity data.

Applicant then argues that "[t]he difference between the method of claim 1 and the prior art is described in the opening pages of the instant specification as turning on the difference between relying on static configurations and dynamically changing configurations. On this important aspect, the Examiner merely comments summarily: 'Furthermore, although the invention of Barritz and Christiano doesn't specifically disclose restating the results of the software usage data based on the variations over time of the computer capacity data, it would have been obvious to one having ordinary skill in the art to include this limitation, because the combination would have provided accurate usage data to the user, rather than simply adjusting the usage data without notifying the user'. But as noted above, the applicant contends that the environmental scaler has been treated in the prior art as a constant number that is set for a particular operating environment. The prior art did not perceive the problem that is typically encountered with mainframe or very largescale computers where logical partitions and other parameters constantly change the configuration of computers based on dynamic execution of programs and other factors. On this very point, the Examiner is simply relying on logic and purported

Art Unit: 2857

intuition, alleging that it would have been obvious for one having ordinary skill in the art to bridge the gap between the prior art and the instant invention."

The Examiner asserts that Applicant is not referring to the most recent Office action but is instead referring to an Office Action mailed April 18, 2003. The most recent Office Action, mailed December 15, 2003, states that "although the invention of Barritz and Christiano doesn't specifically disclose restating the results of the software usage data based on the variations over time of the computer capacity data, since Barritz discloses the second software including a reporting program that sorts, correlates, consolidates, summarizes, formats, and outputs usage reports (column 8, lines 36-42) and the invention of Christiano teaches combining usage information with the capacity data to form raw, normalized software data to account for difference in the hardware speed (column 16, line 52 to column 17, line 15), it would have been obvious to one having ordinary skill in the art to feedback the combined data into the reporting program of the second software to form a new report (i.e. restate) in order to insure accurate, updated, results in the corrected usage report."

As seen by this statement, the Examiner is not asserting that it would have been obvious to scale the computer usage information based on dynamic capacity information, but is only stating that since Barritz discloses a usage report generating software that outputs usage reports and since Christiano teaches modifying the usage based on capacity information, the combination would have restated the

Art Unit: 2857

usage report based on the modified usage to provide updated results. The statement is only included to refer to the "restating" limitation.

Applicant then argues that "the Examiner is relying in the final analysis on logic, rather than prior art, arguing: 'It would have been obvious to one having ordinary skill in the art to modify the invention of Barritz to include obtaining computer capacity data for normalizing the corresponding software usage data, as taught by Christiano, because, as suggested by Christiano, the combination would have fairly adjusted the software usage data to account for actual usage differences caused by platform specifications...'. But, respectfully, the prior art suggests that parameter[s] being set when the computer is set up and not dynamically and respectively over time, as taught by the present invention. Therefore, the combination of references suggested in the Office Action simply do not lead one to the invention as claimed."

The Examiner asserts that the prior art does suggest the combination of Barritz and Christiano because Christiano suggests that the combination would have fairly adjusted the software usage data to account for actual usage differences caused by platform specifications (column 2, lines 58-65). Applicants arguments that the Examiner is using logic rather than prior art because the invention of Christiano does not determine the computer capacity dynamically over time is not persuasive because the invention of Christiano is not included to teach determining the capacity dynamically over time, as this is the purpose of the invention of Wong.

Applicant then argues that "the Examiner is turning to Wong for the proposition that it teaches software for implementing a new pricing model based upon processor power, etc. The applicant's undersigned representative has reviewed the reference text from Wong and finds nothing there that is relevant to the present invention before the Examiner. The reference text quotes analysis Mike Sun of Giga Information Group: 'Every time you upgrade the machine with more power, Oracle can charge more for it.' The overall thrust of the teaching of this reference is, as applicant itself pointed out, that the prior art contemplated that when a system is set up, somebody who knows the capacity of the computer sets a parameter to identify that capacity to a certain program. But nowhere in the prior art is there any teaching of a running software that tests and adjusts the capacity criteria on the fly and in a manner which allows it to happen while the computer is running, as is clearly implicit in the instant invention which runs a computer program on a repetitive basis to calculate that parameter."

The Examiner first asserts that the invention of Wong is specifically included teach "specifying the determination of the computer capacity dynamically over time" as indicated in the previous Office Action.

The Examiner also asserts that the invention of Wong does teach determining the computer capacity dynamically over time. Determining when "you upgrade the machine with more power" is not the same as determining capacity at an initial setup because the computer is dynamically upgraded over time from a configuration with less power to a configuration with more power.

Art Unit: 2857

Secondly, the Examiner again asserts that independent claims 1 and 25 specifically state, "running a first software and determining the capacity of the computer dynamically over time and obtaining computer capacity data". These limitations only require running a first software and determining/obtaining the capacity data and does not specify that the first software itself determines/obtains the capacity data.

Regardless, it has been pointed out that the invention of Christiano does specifically include software for determining the computer capacity of a client but does not specify that the capacity is determine dynamically over time. The invention of Wong is then include to teach determining computer capacity dynamically over time and therefore the combination of Christiano and Wong arrives at a software for determining the computer capacity of a client dynamically over time.

Applicant's argument that "nowhere in the prior art is there any teaching of a running software that tests and adjusts the capacity criteria on the fly and in a manner which allows it to happen while the computer is running, as is clearly implicit in the instant invention which runs a computer program on a repetitive basis to calculate that parameter" is not persuasive because the claimed limitations do not require adjusting the capacity while the computer is running and further, since claim 11 further limits the computer capacity be based on the "number of processors", it is not understood how the number of processors a computer contains can be changed while the computer is running.

Application/Control Number: 09/757,257 Page 17

Art Unit: 2857

#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

U.S. Patent No. 5,522,070 to Sumimoto teaches a compute resource distributing method and system for distributing a multiplicity of processes to a plurality of computers connected in a network.

U.S. Patent No. 6,234,820 to Rosch teaches a process and apparatus for reducing power usage in microprocessor devices according to the type of activity performed by the microprocessor.

U.S. Patent No. 6,496,823 to Blank et al. teaches a method for apportioning a work unit to execute in parallel in a heterogeneous environment including a plurality of processor and the total system processing capability (i.e. processing power) is based upon the number of processors.

U.S. Patent No. 6,477,520 to Malaviya et al. teaches an adaptive travel purchasing optimization system including a knowledge base accessible via an application program interface.

U.S. Patent Application Publication No. 2001/0025304 to Keith, Jr. teaches a method and apparatus for applying a parametric search methodology to a directory tree database format including a knowledge base accessible via an application program interface.

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (703)308-1309. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703)308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Page 19

jrw September 17, 2004

> MARC S. HOFE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800